

REMARKS**Amended Claims**

Claims 1, 5-10 and 12-19 are amended herein.

Examiner Interview Summary

In a telephonic conversation between Examiner Tommy D. Lee on November 1, 2006, and the below-signed attorney, Andrew C. Walseth, the Examiner and Applicant's Representative discussed the Applicant's response of May 17, 2006, and the scope of the pending claims of the Present Application. The Examiner and Applicant's Representative did not reach an agreement on the pending claims or what was disclosed and taught by cited references.

Applicant believes the foregoing interview summary accurately reflects the substance and scope of the interview and requests notification if the Examiner disagrees with the accuracy or completeness of the interview summary.

Claim Rejections Under 35 U.S.C. § 101

Claims 15-20 were rejected under 35 U.S.C. § 101 because the claimed invention is directed to non-statutory subject matter. These claims recite functional descriptive material comprising a computer program or algorithm that imparts functionality when employed as a computer component. Applicant respectfully traverses this rejection.

Applicant respectfully disagrees with the Examiner's rejection of claims 15-20 under 35 U.S.C. § 101 as being directed to non-statutory subject matter.

Applicant respectfully notes that MPEP §2106(IV)(B)(1)(a), starting at the 3rd Paragraph states: "Computer programs are often recited as part of a claim. Office personnel should determine whether the computer program is being claimed as part of an otherwise statutory manufacture or machine. In such a case, the claim remains statutory irrespective of the fact that a computer program is included in the claim. The same result occurs when a computer program is used in a computerized process where the computer executes the instructions set forth in the computer program. Only when the claimed invention taken as a whole is directed to a mere program listing, i.e., to only its description or expression, is it descriptive material *per se* and hence nonstatutory. Since a computer program is merely a set of instructions capable of being executed by a computer, the computer program itself is not a process and Office personnel

should treat a claim for a computer program, without the computer-readable medium needed to realize the computer program's functionality, as nonstatutory functional descriptive material."

In addition, Applicant also respectfully notes that MPEP §2106(IV)(B)(1), 2nd Paragraph states: "When functional descriptive material is recorded on *some* computer-readable medium it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized." {Emphasis added}

Applicant respectfully maintains that claim 15, from which claims 16-20 depend, recites, in part, "[a] computer-usable medium having computer readable instructions stored thereon for execution by a processor to perform a method of error archiving for an imaging device"

Applicant further notes that computer-usable mediums are defined, at least at Paragraph [0015] of the Specification of the Present Application, and are stated as being "computer-usable media such as a static random access memory (SRAM), dynamic random access memory (DRAM), a non-volatile memory device, a register, magnetic media, optical media, or the like." Applicant respectfully maintains that these storage devices are computer components and therefore statutory. Applicant also respectfully maintains that "a computer-usable medium having computer readable instructions stored thereon" would be viewed as equivalent to a computer-readable medium by one of ordinary skill in the art.

Applicant also respectfully maintains that MPEP §2106(IV)(B)(1) states that "[d]escriptive material can be characterized as either 'functional descriptive material' or 'nonfunctional descriptive material.' In this context, 'functional descriptive material' consists of data structures and computer programs which impart functionality when employed as a computer component." and that MPEP §2106(IV)(B)(1)(a) further states that "[w]hen a computer program is recited in conjunction with a physical structure, such as a computer memory, Office personnel should treat the claim as a product claim."

Applicant therefore contends that a interpretation of MPEP §2106(IV)(B)(1) and MPEP §2106(IV)(B)(1)(a) as stating that any claim reciting a structure other than a "computer-readable medium" as being non-statutory, as maintained by the Examiner, to be too narrow of an application and contrary to the guidance of MPEP §2106(IV)(B)(1) and MPEP §2106(IV)(B)(1)(a).

As such, Applicant asserts that the relevant features of claims 15-20, in particular, the claiming of "a computer-usable media", as a statutory claiming of a computer program in conjunction with a physical structure, and described in the specification in such a way as to

enable one skilled in the art to practice the invention. Applicant therefore contends claims 15-20 are statutory and respectfully requests reconsideration and withdrawal of the rejection to claims 15-20 by the Examiner.

Claim Rejections Under 35 U.S.C. § 103

Claims 1-3, 5, 6, 8-10 and 12-20 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Mizutani (U.S. Patent No. 6,078,400) in view of Takeda et al.(U.S. Patent No. 5,845,057). Applicant respectfully traverses this rejection and submits that claims 1-3, 5, 6, 8-10 and 12-20 are allowable for the following reasons.

In regards to Mizutani, the Examiner maintained that “Mizutani discloses an imaging device comprising: a processor adapted to compile error information when an error is detected, wherein the error is based on one or more imaging device processes . . . and a storage device coupled to the processor, wherein the processor is adapted to store the error information for one or more of transmission, retrieval, and disposal of the error information based on user criteria (image data storing device stores image data as error information, which is sent by error information sending device to client apparatuses (column 7, lines 32-37)).” (Office Action mailed August 18, 2006, Page 3).

Applicant continues to respectfully maintain that error information is only defined in Mizutani as the partially rendered image at the point the error occurred (*See*, Mizutani Figures 1, 3A and 4; Column 1, Lines 39-59; Column 2, Lines 12-35, 46-66; Column 7, Lines 28-37, 59-67; and Column 8, Line 16 to Column 10, Line 3). In addition, Applicant respectfully continues to maintain that Mizutani does not compile error information as recited in the Applicant’s claims, as admitted by the Examiner on Page 4 of the Office Action mailed March 23, 2006 (“Mizutani does not disclose error information for two or more errors stored in the storage device or error file, wherein the error information includes two or more of a location where the error occurred, a type of error detected, a program address where the error occurred, contents of the file being processed when the error occurred, sequence of events that led up to the error, type of file being processed when the error occurred, size of the file being processed when the error occurred, or a stack trace . . .”).

Further, Applicant also continues to respectfully maintain that Mizutani does not save or store error information on a computer-usable medium in response to an error, but only takes the existing partially generated image data (the bitmap) from the errored print job to send to the user. Applicant additionally maintains that Mizutani only has one (not two or more) partially

generated image in its memory at a time and thus, even if it does store error information, it does not store error information for two or more error occurrences. *See*, Mizutani, Figures 1, 3A, 4 and 5A-5C; Column 5, lines 34-47; Column 6, line 52 to Column 7, line 22; Column 7, line 28-67; and Column 8, lines 4-65.

In regards to Takeda et al., the Examiner stated that "Takeda discloses a document management table and error detection table that store error information for two or more errors (noting Fig. 12, error information stored under EXECUTION STATE for documents 1 and 2; noting Fig. 13, error information stored for four different types of errors). Takeda further discloses a print processing method for a plurality of printing apparatuses connected to a network, wherein a report sheet image is generated, showing, in addition to a name of a substitute printing apparatus, a current state of the apparatus having an error, measures to remove the error, etc. (read Abstract). The report sheet image displays user and administrator error information (column 9, line 32 - column 10, line 53; Figs. 8-1 1)). The report sheet is, in fact, a type of storage device, for the information regarding the errors are "stored" on the sheet. It has been recognized in the art that a sheet of paper with printed information thereon is a type of storage medium for that information." (Office Action mailed August 18, 2006, Page 5).

Applicant respectfully disagrees and continues to maintain that Takeda et al. discloses a networked printing system of terminals and printers having an error processing system that, when an error occurs, handles the error and/or reroutes the print job by reference to look up tables, printing an error report sheet. Specifically, Applicant maintains, that Takeda et al. contains a document managing table (i.e., a print job queue with job execution state; Takeda et al. Figure 12; and Column 10, Line 54 to Column 11, Line 46.), an error detecting table (i.e., a table of error and caution state threshold levels and their associated codes); Takeda et al. Figure 13 and Column 11, Line 47 to Column 12, Line 36.), and an error processing determining table (i.e., a table of actions for the device to take on the occurrence of a selected error code; Takeda et al. Figure 14 and Column 12, Lines 37-67.). The tables of the imaging device of Takeda et al. allow job tracking and allow re-routing of print jobs to other printers on the network. In addition, the image device of Takeda et al. prints an error report message to the user if an error has occurred, as detailed above. *See*, Takeda et al., Figures 20-26; Abstract; Summary; and Column 6, lines 14-40. Applicant also respectfully maintains that one of ordinary skill in the art would not recognize a paper print out as error information stored on a computer-usable medium, in particular, a computer-usable medium as defined in the Specification of the Present Application.

Applicant therefore respectfully maintains that both Mizutani and Takeda et al. do not teach or suggest an imaging device that is adapted to compile the error information when an error is detected and selectively store in a storage device the error information for two or more errors, wherein the storage device is a computer-readable medium and where the error information includes two or more of a location where the error occurred, a type of error detected, a program address where the error occurred, contents of the file being processed when the error occurred, sequence of events that led up to the error, type of file being processed when the error occurred, size of the file being processed when the error occurred, a page number, an error code, and a stack trace, either alone or in combination. Applicant therefore respectfully submits that combining the elements of Mizutani with Takeda et al. fails to teach or suggest all elements of Applicant's claimed invention, either alone or in combination.

Applicant's claim 1, as amended, recites "[a]n imaging device, comprising: a processor adapted to compile error information when an error is detected, wherein the error is based on one or more imaging device processes; a print engine coupled to the processor and adapted to produce tangible output images; and a storage device coupled to the processor, wherein the storage device is a computer-readable medium and where the processor is adapted to store in the storage device the error information for two or more errors for one or more of transmission, retrieval, and disposal of the error information based on user criteria; wherein the error information stored by the processor in the storage device is selectable from two or more of a location where the error occurred, a type of error detected, a program address where the error occurred, contents of the file being processed when the error occurred, sequence of events that led up to the error, type of file being processed when the error occurred, size of the file being processed when the error occurred, a page number, an error code, and a stack trace." As detailed above, Applicant submits that Mizutani and Takeda et al. fail to teach or suggest such an imaging device that is adapted to selectively store in a computer-readable medium the error information for two or more errors, either alone or in combination. As such, Mizutani and Takeda et al. fail to teach or disclose all elements of independent claim 1.

Applicant's claim 8, as amended, recites "[a] method of error archiving for an imaging device, comprising: monitoring system operations for the imaging device; and when an error is detected, compiling information about the error into an error file stored on a storage device of the imaging device for one or more of storage, transmission, retrieval, and disposal; wherein the storage device is a computer-readable medium; wherein the information about two or more errors is stored in the error file; and wherein the information about each error stored on the storage

device is configurable and includes two or more of a location where the error occurred, a type of error detected, a program address where the error occurred, contents of the file being processed when the error occurred, sequence of events that led up to the error, type of file being processed when the error occurred, size of the file being processed when the error occurred, and a stack trace.” As detailed above, Applicant submits that Mizutani and Takeda et al. fail to teach or suggest such a method of error archiving for an imaging device, either alone or in combination. As such, Mizutani and Takeda et al. fail to teach or disclose all elements of independent claim 8.

Applicant’s claim 15, as amended, recites “[a] computer-readable medium having computer readable instructions stored thereon for execution by a processor to perform a method of error archiving for an imaging device comprising: monitoring system operations of the imaging device; and when an error is detected, compiling information about the error into an error file and storing it on a storage device for one or more of storage, transmission, retrieval, and disposal; wherein the storage device is a computer-readable medium; wherein the information for two or more errors is stored in the error file; and wherein the information about each error stored by the processor on the storage device is selectable and includes two or more of a location where the error occurred, a type of error detected, a program address where the error occurred, contents of the file being processed when the error occurred, sequence of events that led up to the error, type of file being processed when the error occurred, size of the file being processed when the error occurred, a page number, an error code, and a stack trace.” As detailed above, Applicant submits that Mizutani and Takeda et al. fail to teach or suggest such a computer-readable medium and method, either alone or in combination. As such, Mizutani and Takeda et al. fail to teach or suggest all elements of independent claim 15.

Applicant respectfully contends that claims 1, 8 and 15 as pending have been shown to be patentably distinct from the cited reference. As claims 2-3, 5-6, 8-10, 12-14, and 16-20 depend from and further define claims 1, 8 and 15, respectively, they are also considered to be in condition for allowance. Accordingly, Applicant respectfully requests reconsideration and withdrawal of the rejection under 35 U.S.C. § 103(a) and allowance of claims 1-3, 5, 6, 8-10 and 12-20.

Claim 4 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Mizutani (U.S. Patent No. 6,078,400) in view of Takeda et al. (U.S. Patent No. 5,845,057) and further in view of Venkatraman et al. (U.S. Patent No. 5,956,487). Applicant respectfully traverses this rejection and submits that claim 4 is allowable for the following reasons.

Applicant respectfully maintains, as stated above, that Mizutani and Takeda et al. fail to teach or suggest, either alone or in combination all elements of claim 1, from which claim 4 depends from. As such, Applicant respectfully maintains that Mizutani and Takeda et al. also fail to teach or suggest all elements of claim 4. In addition, Applicant respectfully maintains that Venkatraman et al. discloses an embedded web server system for networked devices allowing user interface functions to be accessed over a network. *See*, Venkatraman et al., Abstract and Summary. Applicant therefore respectfully submits that combining the elements of Mizutani and Takeda et al. with Venkatraman et al. fails to teach or suggest all elements of independent claim 1 and thus also fails to teach or suggest all elements of dependent claim 4, either alone or in combination.

Applicant respectfully contends that claim 1 as pending has been shown to be patentably distinct from the cited references, either alone or in combination. As claim 4 depends from and further defines claim 1 it is also considered to be in condition for allowance. Accordingly, Applicant respectfully requests reconsideration and withdrawal of the rejection under 35 U.S.C. § 103(a) and allowance of claim 4.

Claim 7 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Mizutani (U.S. Patent No. 6,078,400) in view of Takeda et al.(U.S. Patent No. 5,845,057) and further in view of Sudo et al. (J.P. Publication No. 5318887). Applicant respectfully traverses this rejection and submits that claim 4 is allowable for the following reasons.

Applicant respectfully maintains, as stated above, that Mizutani and Takeda et al. fail to teach or suggest, either alone or in combination all elements of claim 1, from which claim 7 depends from. As such, Applicant respectfully maintains that Mizutani and Takeda et al. also fail to teach or suggest all elements of claim 7. In addition, Applicant respectfully maintains that Sudo et al. discloses a printer with a non-volatile memory card that is adapted to store data and history information while the printer is in a maintenance mode. *See*, Sudo et al., Abstract. Applicant therefore respectfully submits that combining the elements of Mizutani and Takeda et al. with Sudo et al. fails to teach or suggest all elements of independent claim 1 and thus also fails to teach or suggest all elements of dependent claim 7, either alone or in combination.

Applicant respectfully contends that claim 1 as pending has been shown to be patentably distinct from the cited references, either alone or in combination. As claim 7 depends from and further defines claim 1 it is also considered to be in condition for allowance. Accordingly, Applicant respectfully requests reconsideration and withdrawal of the rejection under 35 U.S.C.

§ 103(a) and allowance of claim 7.

Claim 11 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Mizutani (U.S. Patent No. 6,078,400) in view of Takeda et al.(U.S. Patent No. 5,845,057) and further in view of Ohtani (U.S. Patent No. 6,108,099). Applicant respectfully traverses this rejection and submits that claim 11 is allowable for the following reasons.

Applicant respectfully maintains, as stated above, that Mizutani and Takeda et al. fail to teach or suggest, either alone or in combination, all elements of claim 8, from which claim 11 depends from. As such, Applicant respectfully maintains that Mizutani and Takeda et al. also fail to teach or suggest all elements of claim 11. In addition, Applicant respectfully maintains that Ohtani discloses a networked image forming system having email communication of abnormal conditions to users and administrators. *See*, Ohtani, Figures 4 and 6; Abstract and Summary. Applicant therefore respectfully submits that combining the elements of Mizutani and Takeda et al. with Ohtani fails to teach or suggest all elements of independent claim 8, and thus also fails to teach or suggest all elements of dependent claim 11, either alone or in combination.

Applicant respectfully contends that claim 8 as pending has been shown to be patentably distinct from the cited references, either alone or in combination. As claim 11 depends from and further defines claim 8 it is also considered to be in condition for allowance. Accordingly, Applicant respectfully requests reconsideration and withdrawal of the rejection under 35 U.S.C. § 103(a) and allowance of claim 11.

RESPONSE TO NON-FINAL OFFICE ACTION

Serial No. 09/991,804

Title: DEVICE ERROR ARCHIVE

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Attorney Docket No. 10008076-1

CONCLUSION

In view of the above remarks, Applicant believes that all pending claims are in condition for allowance and respectfully requests a Notice of Allowance be issued in this case. Please charge any further fees deemed necessary or credit any overpayment to Deposit Account No.08-2025.

If the Examiner has any questions or concerns regarding this application, please contact the undersigned at (612) 312-2207.

Respectfully submitted,

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